

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Canceled)
2. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination, comprising (a) one or more representatives of the antibiotic salts that are sparingly soluble in water, namely gentamicin dodecyl sulfate, gentamicin dodecylsulfonate, gentamicin laurate, gentamicin decyl sulfate, amikacin dodecyl sulfate, amikacin dodecylsulfonate, amikacin laurate, kanamycin dodecyl sulfate, kanamycin dodecylsulfonate, kanamycin laurate, kanamycin myristate, tobramycin dodecyl sulfate, tobramycin dodecylsulfonate, tobramycin laurate, tobramycin myristate, vancomycin dodecyl sulfate, vancomycin laurate, vancomycin myristate, teicoplanin/vancomycin, clindamycin laurate, tetracycline dodecyl sulfate, tetracycline laurate, minocycline dodecyl sulfate, minocycline laurate, oxytetracycline dodecyl sulfate, oxytetracycline laurate, rolitetracycline laurate, rolitetracycline dodecyl sulfate, chlortetracycline dodecyl sulfate, chlortetracycline laurate, ciprofloxacin laurate, ciprofloxacin myristate, moxifloxacin myristate, chlorhexidine dodecyl sulfate, chlorhexidine laurate and chlorhexidine caprate, and optionally (b) an antibiotic, which is readily soluble in water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics,  $\beta$ -lactam antibiotics and tetracycline antibiotics, and optionally

(c) one or more organic ancillary substances suspended in a homogenous polymer mixture to form a suspension wherein the homogenous polymer mixture comprises one or more hydrophobic, nonionic polymers from the groups comprising poly(vinyl chloride), post-chlorinated poly(vinyl chloride), poly(vinylidene chloride), poly(vinyl fluoride), poly(vinylidene fluoride) and copolymers comprising vinyl chloride and one or more nonionic monomers, and which comprises one or more hydrophilic polymers from the groups comprising polyethers, and wherein the suspension forms a composite.

3. (Canceled)

4. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein the composite is formed from a melt that comprises one or more hydrophobic, nonionic polymers from the groups comprising poly(vinyl chloride) and/or copolymers, which comprise vinyl chloride and one or more nonionic monomers, and one or more hydrophilic polymers from the groups comprising polyethers, and optionally plasticizers from the groups comprising the esters of phthalic acid, the esters of trimellitic acid, the esters of phosphoric acid, the esters of citric acid, the esters of tartaric acid, the esters of malic acid, the esters of fatty acids, the esters of adipic acid, the esters of azelaic acid, the esters of sebacic acid, whereby the following are suspended in this melt: one or more antibiotic salts, which are sparingly soluble in water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics, tetracycline antibiotics, quinolone antibiotics and chlorhexidine, and optionally an antibiotic, which is readily soluble in

water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics, and tetracycline antibiotics, and optionally one or more organic ancillary substances.

5. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein the quantity of hydrophilic polymer in the homogeneous polymer mixture amounts to between 0.1 and 60 percent by weight.

6. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein poly(ethylene glycol) with a number average molecular weight in the range from 120  $\text{gmol}^{-1}$  to 35,000  $\text{gmol}^{-1}$  is used as the polyether.

7. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein poly(propylene glycol) with a number average molecular weight in the range from 200  $\text{gmol}^{-1}$  to 35,000  $\text{gmol}^{-1}$  is used as the polyether.

8. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein poly(ethylene glycol) with a number average molecular weight in the range from 120  $\text{gmol}^{-1}$  to 600  $\text{gmol}^{-1}$  is used as the polyether.

9. (Currently Amended) ~~Antibiotic-polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein vinyl chloride copolymers with number average molecular weights from 20,000 gmol<sup>-1</sup> to 2,000,000 gmol<sup>-1</sup> are used as the hydrophobic polymers, whereby these vinyl chloride copolymers are prepared from vinyl chloride and the following comonomers: vinylidene chloride, vinyl fluoride, vinyl acetate, acrylonitrile, aliphatic esters of acrylic acid, aromatic esters of acrylic acid, aliphatic esters of methacrylic acid, aromatic esters of methacrylic acid, ethene, propene, butadiene, isoprene, 2-chlorobutadiene and isopropylene.

10. (Currently Amended) ~~Antibiotic-polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, wherein sulfonamides and/or antiphlogistic substances and/or anesthetic substances are used as the organic ancillary substances.

11. (Currently Amended) ~~Antibiotic-polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim [[3]] 29, wherein the free-flowing suspension forms composites in the form of filaments as a result of spinning together with the evaporation of the cyclohexanone and/or tetrahydrofuran.

12. (Currently Amended) ~~Antibiotic-polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim [[3]] 29, wherein

the free-flowing suspension forms composites in the form of foils as a result of casting together with the evaporation of the cyclohexanone and/or tetrahydrofuran.

13. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim [[3]] 29, wherein the free-flowing suspension forms composites in the form of powders and granulated materials as a result of spraying together with the evaporation of the cyclohexanone and/or tetrahydrofuran.

14. (Canceled)

15. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, which comprises plastic tubes, plastic filaments, plastic foils, spherical plastic objects, roller-like plastic objects, or chain-like plastic objects coated with the composite.

16. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, which comprises catheters, tracheal cannulas, or tubes for intraperitoneal feeding coated with the composite.

17. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, which

comprises implantable metal plates, metal nails, or metal screws coated with the composite.

18. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, which comprises medically usable shaped plastic objects, plastic foils, plastic filaments, metal plates, or metal pipes glued together or to a substrate with the composite.

19. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, which comprises antibiotic shaped objects comprising granulated plastic materials, plastic powders, resorbable glass powders, non-resorbable glass powders, or quartz powders binded with the composite.

20. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim + 28, which comprises antibiotic laminates binded with the composite.

21. (Currently Amended) Method of using an ~~antibiotic polymer combination/antibiotics polymer combination~~ antibiotic polymer combination in accordance with Claim [[3]] 29, comprising applying the free-flowing suspension to the surface of plastics and/or metals via immersion, spraying, painting, brushing or rolling,

and forming a composite in the form of a coating via the evaporation of the cyclohexanone.

22. (Currently Amended) Method of using an ~~antibiotic-polymer combination/antibiotics-polymer combination~~ antibiotic polymer combination in accordance with Claim + 28, comprising applying the composite in the form of a coating to medically usable plastic filaments, plastic foils, plastic tubes, plastic pouches, or plastic bottles.

23. (Currently Amended) Method of using an ~~antibiotic-polymer combination/antibiotics-polymer combination~~ antibiotic polymer combination in accordance with Claim + 28, comprising applying the composite in the form of a coating to spherical shaped objects, to roller-like shaped objects, or to chain-like shaped objects, whereby these comprise plastic and/or metal.

24. (Currently Amended) Method of using an ~~antibiotic-polymer combination/antibiotics-polymer combination~~ antibiotic polymer combination in accordance with Claim + 28, comprising applying the composite in the form of a coating to shaped objects, foils, or filaments comprising poly(methacrylic acid esters), poly(acrylic acid esters) poly(methacrylic acid esters-co-acrylic acid esters), poly(vinyl chloride), poly(vinylidene chloride), silicone, polystyrene, or polycarbonate.

25. (Currently Amended) Method of using an ~~antibiotic polymer combination/antibiotics polymer combination~~ antibiotic polymer combination in accordance with Claim 1 ~~28~~, comprising applying the composite in the form of a coating to the surface of metals and/or plastics via sintering.

26. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim 2, wherein the composite is formed from a free-flowing suspension, which comprises a homogeneous mixture of cyclohexanone and/or tetrahydrofuran and optionally plasticizers from the groups comprising the esters of phthalic acid, the esters of trimellitic acid, the esters of phosphoric acid, the esters of adipic acid, the esters of azelaic acid, the esters of sebacic acid, and one or more hydrophobic, nonionic polymers from the groups comprising poly(vinyl chloride) and copolymers comprising vinyl chloride and one or more nonionic monomers, and one or more hydrophilic polymers from the groups comprising polyethers, whereby, as a result of evaporation of the cyclohexanone and/or tetrahydrofuran, the following are suspended in this free-flowing suspension: one or more antibiotic salts, which are sparingly soluble in water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics, tetracycline antibiotics, quinolone antibiotics and chlorhexidine, and optionally an antibiotic, which is readily soluble in water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics,  $\beta$ -lactam antibiotics and tetracycline antibiotics, and optionally one or more organic ancillary substances.



27. (Currently Amended) ~~Antibiotic polymer combination/antibiotics polymer combination~~ Antibiotic polymer combination in accordance with Claim 2, wherein the composite is formed from a melt that comprises one or more hydrophobic, nonionic polymers from the groups comprising poly(vinyl chloride) and/or copolymers, which comprise vinyl chloride and one or more nonionic monomers, and one or more hydrophilic polymers from the groups comprising polyethers, and optionally plasticizers from the groups comprising the esters of phthalic acid, the esters of trimellitic acid, the esters of phosphoric acid, the esters of citric acid, the esters of tartaric acid, the esters of malic acid, the esters of fatty acids, the esters of adipic acid, the esters of azelaic acid, the esters of sebacic acid, whereby the following are suspended in this melt: one or more antibiotic salts, which are sparingly soluble in water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics, tetracycline antibiotics, quinolone antibiotics and chlorhexidine, and optionally an antibiotic, which is readily soluble in water, from the groups comprising aminoglycoside antibiotics, lincosamide antibiotics, and tetracycline antibiotics, and optionally one or more organic ancillary substances.

28. (New) An antibiotic polymer combination in the form of a composite, wherein said antibiotic polymer combination comprises:

- (a) one or more sparingly water-soluble salts of one or more antibiotics selected from the group consisting of aminoglycoside antibiotics, lincosamide antibiotics, tetracycline antibiotics, glycopeptide antibiotics, quinolone antibiotics and chlorhexidine; and

- (b) optionally one or more readily water-soluble antibiotics selected from the group consisting of readily water-soluble aminoglycoside antibiotics, readily water-soluble lincosamide antibiotics, readily water-soluble  $\beta$ -lactam antibiotics and readily water-soluble tetracycline antibiotics; and
- (c) optionally one or more organic ancillary substances;

suspended in:

- (d) a homogeneous polymer mixture comprising:
  - (i) one or more hydrophobic, nonionic polymers selected from the group consisting of poly(vinyl)chloride, post-chlorinated poly(vinyl)chloride, poly(vinylidene chloride), poly(vinyl fluoride), poly(vinylidene fluoride) and copolymers formed by copolymerizing at least vinyl chloride and one or more nonionic monomers; and
  - (ii) one or more hydrophilic polymers selected from the group consisting of polyethers;

to form a composite.

29. (New) Antibiotic polymer combination in accordance with Claim 1, wherein the composite has been formed by evaporation of cyclohexanone and/or tetrahydrofuran from a free-flowing suspension comprising:

- (a) one or more sparingly water-soluble salts of one or more antibiotics selected from the group consisting of aminoglycoside antibiotics, lincosamide antibiotics, tetracycline antibiotics, glycopeptide antibiotics, quinolone antibiotics and chlorhexidine; and
- (b) optionally one or more readily water-soluble antibiotics selected from the group consisting of readily water-soluble aminoglycoside antibiotics, readily water-soluble lincosamide antibiotics, readily water-soluble  $\beta$ -lactam antibiotics and readily water-soluble tetracycline antibiotics; and
- (c) optionally one or more organic ancillary substances;

suspended in:

- (d) a homogeneous polymer mixture comprising:
  - (i) one or more hydrophobic, nonionic polymers selected from the group consisting of poly(vinyl)chloride and copolymers formed by copolymerizing at least vinyl chloride and one or more nonionic monomers; and
  - (ii) one or more hydrophilic polymers selected from the group consisting of polyethers;
  - (iii) cyclohexanone and/or tetrahydrofuran;
  - (iv) optionally one or more plasticizers selected from the group consisting of esters of phthalic acid, esters of trimellitic acid, esters of phosphoric acid, esters of adipic acid, esters of azelaic acid, esters of sebacic acid.

30. (New) Antibiotic polymer combination in accordance with Claim 28, wherein the composite is in the form of a shaped object, a coating or a foil.